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| 10/075,552   | 02/13/2002  | Ryuji Biro           | 1232-4819           | 8407             |
| 27123  | 7590        | 03/18/2008           |                     |                  |
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| EXAMINER   |             |                      |                     |                  |
| LU, JIPING   |             |                      |                     |                  |
| ART UNIT   |             | PAPER NUMBER         |                     |                  |
| 3749   |             |                      |                     |                  |
| NOTIFICATION DATE  |             | DELIVERY MODE        |                     |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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# Office Action Summary

**Application No.**

10/075,552

**Applicant(s)**

BIRO ET AL.

**Examiner**

Jiping Lu

**Art Unit**

3749

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 34-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 34-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/CI/CD)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date 1/22/08

## **DETAILED ACTION**

### ***Claims Status***

1. Claims 1-33 have been canceled. Claims 34-37 are pending.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 34-37 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification failed to disclose the claimed “predetermined time” therefore one skilled in the art would not be able to make and use the invention without undue experimentation. It is not clear what the “predetermined time” is. How much time is predetermined? What is the importance and criticality of such claimed “predetermined time”?

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 34-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Tomoharu et al. (JP 11-224839).

Tomoharu et al. discloses a rinsing method comprising the steps of accommodating an article 12, to be rinsed, into a second container 15 which is disposed inside a first container (room used to house the container 15), introducing an oxygen gas 10a into the second container 15, irradiating the article with ultraviolet rays from a light source 14 disposed outside second container, and introducing a nitrogen gas 8a into the second container 15 and exhausting (thru 9a) the oxygen gas in the second container 15 to exchange an ambience of the second container same as claimed. The oxygen gas or the ozone gas in the first container is exhausted (thru doors or windows of aforementioned room used to house the second container 15). The article is unloaded from the first and second containers after keeping the article in the nitrogen containing ambience for a predetermined time (any time is deemed to be a predetermined time and it is inherent that the article will be unloaded from the first and second containers after rinsing). The second container has a clearance (from the statement of page 3, lines 44-46, it is implicitly disclosed that there is a clearance, otherwise it would mean that the container 15 is perfectly sealed and there would not be a need for maintaining a higher pressure inside) through the first container. The first gas supplying means 16, 21, 22, 23 is configured to introduce the rinsing gas into the second container to maintain an ambience in the second container (see page 3, lines 16-17) which ambience is different from that of said first container and also to keep an internal pressure higher than that of said first container (see page 3, lines 44-46).

***Claim Rejections - 35 USC § 103***

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
7. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tomoharu et al. (JP 11-224839).

The rinsing method of Tomoharu et al. as above includes all that is recited in claim 37 except for the material of the article to be cleaned. With regard to the claimed material of the article to be cleaned, it would have been obvious to one having ordinary skill in the art at the time the invention was made to choose the article with any kind of material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

8. Claims 34-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamiya (U.S. Pat. 4,989,031) in view of Mukai (U.S. Pat. 5,120,394) and Kuzumoto et al. (U. S. Pat. 6,616,773).

Kamiya shows a rinsing method comprising providing a first container I, a light emitting unit I, 11, 12 disposed inside the first container I for emitting laser lights, a second container II, III disposed inside the first container I and being adapted to accommodate an article 2, 4 to be rinsed, the second container II, III having a clearance through the first container I (see Fig. 1), a first gas supplying means 31, 32 for introducing a rinsing gas into the second container II, III to maintain an ambience of the second container which ambience is different from that of the first container and also to keep an internal pressure higher than that of the first container I

(col. 4, lines 18-25). The oxygen gas is exhausted in the first container 1 so that a nitrogen containing ambience remains in each of the first and second containers (see Col. 6, lines 7-30). However, Kamiya does not show irradiating the article with ultraviolet rays and introducing a nitrogen gas into the second container and exhausting the oxygen gas or ozone gas in the second container to exchange an ambience of the second container. Mukai teaches a concept of using ultraviolet light generator for irradiating a laser ray (wavelength: 193 nm) over the surface of substrate 11 (col. 5, lines 6-9) and introducing N<sub>2</sub> gas 8, 9 into the inner (second) container. Kuzumoto et al. teach a concept of introducing a nitrogen gas into the second container 1 and exhausting the oxygen gas or ozone gas in the second container to exchange an ambience of the second container (col. 2, lines 33-36 and Fig. 1). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify method of Kamiya to include a step of supplying ultraviolet rays as taught by Mukai and a step of introducing a nitrogen gas to the second container for replacing the oxygen gas or ozone gas in the second as taught by Kuzumoto et al. in order to more efficiently clean the articles inside the second container. With regard to the claimed material of the article to be cleaned, it would have been obvious to one having ordinary skill in the art at the time the invention was made to choose the article with any kind of material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

***Response to Arguments***

9. Applicant's arguments filed on 12/12/07 have been carefully considered. However, the arguments are not persuasive to overcome the rejection. First, the claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Second, on pages 4-6 of the Remarks, the applicant argued that the present application claims priority to Japanese Application No. 2001-035113 which was filed on February 13, 2001, thereby antedating Sugata's U. S. filing date of August 23, 2001. The examiner agrees. The rejection is withdrawn. Third, on pages 6-7 of the Remarks, the applicant traversed the rejection over the prior art references of kamiya in view of Mukai and Kuzumoto patents. The examiner disagrees. The claims still fail to define over the art. Kamiya shows an over all rinsing method with a first container I, a light emitting unit 1, 11, 12 disposed inside the first container I, a second container II, III disposed inside the first container I, a first gas supplying means 31, 32 for introducing a rinsing gas into the second container II, III to maintain an ambience of the second container. Mukai teaches a concept of using ultraviolet light generator for irradiating a laser ray (wavelength: 193 nm) over the surface of substrate 11 (col. 5, lines 6-9) and introducing N<sub>2</sub> gas 8, 9 into the inner (second) container. Kuzumoto et al. teach a concept of introducing a nitrogen gas into the second container I and exhausting the oxygen gas or ozone gas in the second container to exchange an ambience of the second container (col. 2, lines 33-36 and Fig. 1). Therefore, it would have been obvious to one skilled in the art to modify method of Kamiya to include a step of supplying ultraviolet rays as taught by Mukai and a step of introducing a nitrogen gas to the second container for replacing the oxygen gas or ozone gas in

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the second as taught by Kuzumoto et al. in order to more efficiently clean the articles inside the second container. In view of the combined teaching of the prior art references, one skilled in the art would have found it to be obvious to combine because the results would have been predictable (see KSR International Co. v. Teleflex, Inc. 82 USPQ 2d 1385 (2007)).

### *Conclusion*

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jiping Lu whose telephone number is 571 272 4878. The examiner can normally be reached on Monday-Friday, 9:00 AM - 5:30 PM.



If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, STEVEN B. MCALLISTER can be reached on 571 272-6785. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jiping Lu/  
Primary Examiner  
Art Unit 3749

J. L.